(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



. I CONTID EXPANSED DE CONTIDENTAL ENTRE CONTIDENTE DE LA FOLIA CONTIDENTAL CO

(43) International Publication Date 28 October 2004 (28.10.2004)

PCT

(10) International Publication Number WO 2004/092530 A3

(51) International Patent Classification?: E21B 7/20

(21) International Application Number:

PCT/US2004/011177

(22) International Filing Date: 13 April 2004 (13.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/462,750

14 April 2003 (14.04.2003) US

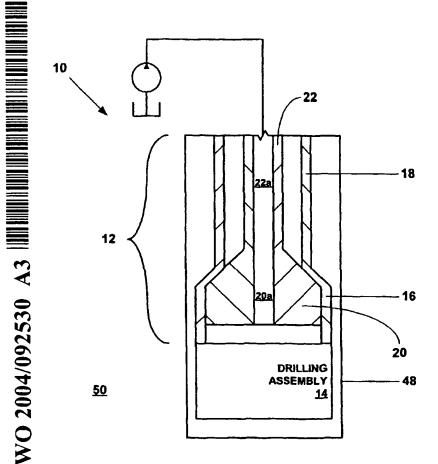
- (71) Applicant (for all designated States except US): ENVENTURE GLOBAL TECHNOLOGY [US/US]; 16200 A. Park Row, Houston, TX 77084 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): COOK, Robert, Lance [US/US]; 934 Caswell Court, Katy, TX 77450 (US). SMOLEN, Randall, Mercer [US/US]; 3027 Kenross, Houston, TX 77043 (US). KENT, Gerald, Edward

[CA/CA]; #10 - 26120, TWP. 511, Devon, Alberta T7Y 1B8 (CA). HAY, Richard, Thomas [CA/CA]; 5 Lodgepole Court, St. Albert, Alberta T8N 2R8 (CA). KEEN, Jerry, Lavelle, Jr. [US/US]; 3630 Rolling Terrace, Spring, TX 77388 (US).

- (74) Agent: MATTINGLY, Todd; Haynes and Boone, LLP, Suite 3100, 901 Main Street, Dallas, TX 75202 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: RADIALLY EXPANDING CASING AND DRILING A WELLBORE



(57) Abstract: A method of radially expanding a wellbore casing (18) and drilling a wellbore (48).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 21 April 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.	
PCT/US04/11177	

A. CLAS	SIFICATION OF SUBJECT MATTER				
IPC(7)	: E21B 7/20				
US CL : 175/22,57,171; 166/208,384					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols) U.S.: 175/22,57,171; 166/208,384					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) East: (expan\$4 with (tub\$5 pip\$3 conduit\$1 string\$1 casing\$1 liner\$1)) same drill\$3					
C. DOC	UMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.		
х	US 6,543,552 B1 (METCALFE et al.) 08 April 2000 especially Figs. 1-7.	3 (08.04.2003), see entire document,	5, 11		
Further documents are listed in the continuation of Box C. See patent family annex.					
Special categories of cited documents: A document defining the general state of the art which is not considered to be of particular relevance E earlier application or patent published on or after the international filing date		priority date and not in conflict with understand the principle or theory u "X" document of particular relevance; the considered novel or cannot be consi	ater document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
	nt which may throw doubts on priority claim(s) or which is cited lish the publication date of another citation or other special reason ified)				
•O. qocume	· · · · · · · · · · · · · · · · · · ·		nt family		
	-P" document published prior to the international filing date but later than the				
		Date of mailing of the international search report 14 FEB 2005			
	Whorized officer				
M Co	Mail Stop PCT, Aun: ISA/US Commissioner for Patents Zakiya N. Walker				
Al	Facsimile No. (703) 305-3230 Telephone No. (703) 306-1113				

Form PCT/ISA/210 (second sheet) (January 2004)